LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A purified preparation of mammalian hemangioblast cells which (i) is capable of proliferation in an *in vitro* culture for more than 40 generations, (ii) does not induce tumor formation in an immunodeficent Rag1 deficient mouse, (iii) maintains the potential to differentiate to hematopoietic and endothelial cells throughout the duration of said culture, and (iv) are inhibited from differentiation when cultured on a gelatinized, feeder-free layer.

2. (original) The preparation of claim 1, wherein the cells are not immunoreactive with CD34, PECAM-1 (or CD31), Flk-1, Tie-2, Sca-1, Thy-1 and P-selectin markers.

3. (original) The preparation of claim 1 wherein the cells are human.

4. (original) The preparation of claim 2 wherein the cells are human.

5. (original) The preparation of claim 1 wherein the mammalian hemangioblast cells are mouse embryonic cell line deposited under ATCC PTA-4300.

6. (original) A method of preparing a mammalian hemangioblast cell line, comprising the steps of: (i) culturing on a feeder layer a cell source selected from the group consisting of a delayed mammalian blastocyst, an early post-implantation embryo together with its extra-embryonic tissues, an embryonic stem cell-derived embryoid body, and bone marrow tissue, (ii) selecting colonies of adherent fibroblastic cells with loosely attached rapidly dividing round cells having ring-like cells at their edges, and (iii) testing cells in the selected colonies for ability to differentiate into both endothelial and hematopoietic cells.

7. (original) The method as claimed in claim 6, wherein the cell source is bone marrow tissue, and further comprising the step of harvesting bone marrow tissue which retains integrity in tissue clumps prior to the step of culturing.

8. (original) The method as claimed in claim 6, wherein the cell source is human.

9. (original) The method as claimed in claim 7, wherein the cell source is human.

10. (original) The method as claimed in claim 6, further comprising maintaining the selected cells on a gelatinized feeder-free layer to inhibit differentiation.

11. (original) The method as claimed in claim 7, further comprising maintaining the selected cells on a gelatinized feeder-free layer to inhibit differentiation.

12. (original) A cell line developed by the method of claim 6.

13. (original) A method for inducing formation of new blood vessels in an ischemic tissue in a patient in need thereof, comprising administering to said patient an effective amount of the purified preparation of mammalian hemangioblast cells according to claim 3 to induce new blood vessel formation in said ischemic tissue.

14. (currently amended) ~~A method of~~ The method as claimed in claim 8, for enhancing blood vessel formation in a patient in need thereof, comprising: (i) selecting the patient in need thereof; (ii) isolating human hemangioblast cells according to the method of claim 8; and (iii) administering the hemangioblast cells to the patient.

15. (currently amended) ~~A method~~ The method as claimed in claim 8, for treating an injured blood vessel in a patient in need thereof, comprising: (i) selecting the patient in need thereof; (ii) isolating human hemangioblast cells according to the method of claim 8; and (iii) administering the hemangioblast cells to the patient.

16. (original) A method of delivering a therapeutic gene to a patient having a condition amenable to gene therapy comprising: (i) selecting the patient in need thereof; (ii) modifying the preparation of claim 3 so that the cells of the preparation carry a therapeutic gene; and (iii) administering the modified preparation to the patient.

17. (original) A commercial package comprising the preparation of claim 3 wherein the preparation has been modified so that the cells of the preparation carry a therapeutic gene, and instructions for treating a patient having a condition amenable to treatment with gene therapy.